# Eastar™ GN007, Natural

Polyethylene Terephthalate Glycol Comonomer

Eastman Chemical Company

## Message:

Eastar™ GN007 Copolyester is a water-clear glycol modified polyethylene terephthalate (PET) with an added mold release. Eastar™ GN007 copolyester will not crystallize and thus offers wider processing latitude than conventional crystallizable polyesters. This material offers an excellent combination of clarity, toughness, and melt strength that makes it useful for a variety of processing techniques and end-use applications.
This product has been GREENGUARD INDOOR AIR QUALITY CERTIFIED®.
The GREENGUARD INDOOR AIR QUALITY CERTIFIED® Mark is a registered certification mark used under license through the GREENGUARD Environmental Institute (GEI). GEI is an industry-independent, non-profit organization that oversees the GREENGUARD Certification Program. The GREENGUARD Certification Program is an industry independent, third-party testing program for low-emitting products and materials for indoor environments. For more information about GEI and to obtain printable certificates for Eastman™ Copolyesters, visit www.greenguard.org. Choose Eastman Chemical Company under the Manufacturer category and click search to display a list of our products.

| General Information | | | |
|---|---|---|---|
| Additive | Mold Release | | |
| Features | Good Melt Strength<br>Good Mold Release<br>Good Processability<br>Good Toughness<br>High Clarity | | |
| Uses | Containers<br>Cosmetic Packaging<br>Furniture<br>Household Goods<br>Personal Care<br>Sporting Goods<br>Stationary Supplies<br>Toothbrush Handles<br>Toys<br>Writing Instruments | | |
| Appearance | Natural Color | | |
| Forms | Pellets | | |
| **Physical** | **Nominal Value** | **Unit** | **Test Method** |
| Specific Gravity | 1.27 | g/cm³ | ASTM D792 |
| Molding Shrinkage - Flow (3.20 mm) | 0.20 to 0.50 | % | ASTM D955 |
| **Hardness** | **Nominal Value** | **Unit** | **Test Method** |
| Rockwell Hardness (R-Scale, 23°C) | 108 | | ASTM D785 |
| **Mechanical** | **Nominal Value** | **Unit** | **Test Method** |
| Tensile Modulus | | | |
| 23°C | 2030 | MPa | ASTM D638 |

| | | | |
|---|---|---|---|
| 23°C | 2000 | MPa | ISO 527-2 |
| Tensile Strength | | | |
| Yield, 23°C | 50.0 | MPa | ASTM D638 |
| Yield, 23°C | 48.0 | MPa | ISO 527-2 |
| Break, 23°C | 30.0 | MPa | ASTM D638 |
| Break, 23°C | 29.0 | MPa | ISO 527-2 |
| Tensile Elongation | | | |
| Yield, 23°C | 4.4 | % | ASTM D638 |
| Yield, 23°C | 4.0 | % | ISO 527-2 |
| Break, 23°C | 180 | % | ASTM D638 |
| Break, 23°C | 200 | % | ISO 527-2 |
| Flexural Modulus | | | |
| 23°C | 2060 | MPa | ASTM D790 |
| 23°C | 2100 | MPa | ISO 178 |
| Flexural Strength | | | |
| 23°C | 68.0 | MPa | ASTM D790 |
| 23°C | 67.0 | MPa | ISO 178 |
| **Impact** | **Nominal Value** | **Unit** | **Test Method** |
| Notched Izod Impact | | | |
| -40°C | 40 | J/m | ASTM D256 |
| 23°C | 110 | J/m | ASTM D256 |
| -40°C | 4.4 | $kJ/m^2$ | ISO 180 |
| 23°C | 9.4 | $kJ/m^2$ | ISO 180 |
| Unnotched Izod Impact | | | ASTM D4218 |
| -40°C | No Break | | |
| 23°C | No Break | | |
| **Thermal** | **Nominal Value** | **Unit** | **Test Method** |
| Deflection Temperature Under Load | | | |
| 0.45 MPa, Unannealed | 70.0 | °C | ASTM D648, ISO 75-2/B |
| 1.8 MPa, Unannealed | 62.0 | °C | ASTM D648, ISO 75-2/A |
| **Optical** | **Nominal Value** | **Unit** | **Test Method** |
| Transmittance (Total) | 90.0 | % | ASTM D1003 |
| Haze | 0.20 | % | ASTM D1003 |
| **Injection** | **Nominal Value** | **Unit** | |
| Drying Temperature | 71.0 | °C | |
| Drying Time | 6.0 | hr | |
| Processing (Melt) Temp | 249 to 271 | °C | |
| Mold Temperature | 16.0 to 38.0 | °C | |

Recommended distributors for this material

## Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China